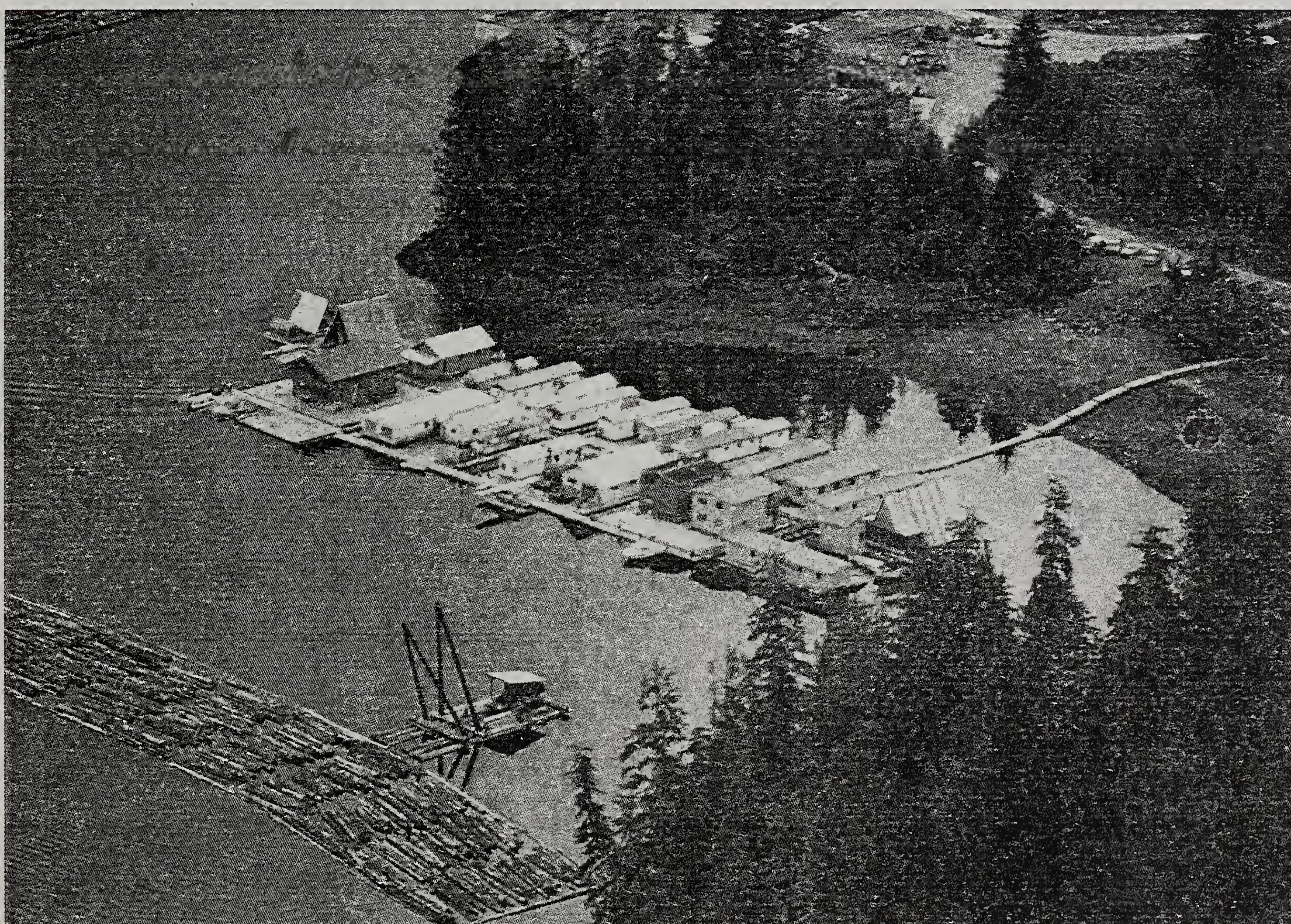
Timber Supply and Demand 1998

Alaska National Interest Lands Conservation Act
Section 706(a) Report to Congress
USDA Forest Service, Alaska Region

Report Number 18



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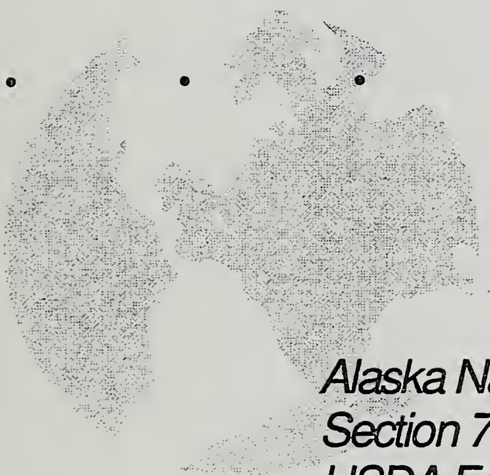

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Preface

This is the eighteenth report prepared in accordance with Section 706(a) of the Alaska National Interest Lands Conservation Act (ANILCA), which requires the Secretary of Agriculture to monitor and report annually on timber supply and demand in Southeast Alaska. The following pages provide a summary of timber sale activity in the region and a review of the primary factors affecting timber markets in fiscal year 1998.

As required by Section 706(a) of ANILCA, this report was prepared in consultation with representatives from the State of Alaska, the affected Native Corporations, the Southeast Alaska timber industry, the Southeast Alaska Conservation Council, and the Southeast Alaska commercial fishing industry.

Copies of this report have been submitted to the U.S. Senate Committee on Energy and Natural Resources and the U.S. House of Representatives Committee on Natural Resources. Additional copies may be obtained by writing to:

Director of Ecosystem Planning and Budgeting
USDA Forest Service, Alaska Regional Office
P.O. Box 21628
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Introduction

Section 706(a) of the Alaska National Interest Lands Conservation Act (ANILCA) directs the Secretary of Agriculture to monitor and report annually on timber supply and demand in southeastern Alaska. Accordingly, this report describes the status of the timber market in Southeast Alaska during the 1998 federal fiscal year (October 1, 1997 – September 30, 1998).

For purposes of this report, timber supply is defined as the sum of: 1) timber sales advertised and timber sales purchased competitively under the Forest Service independent sale program; 2) timber released to the Ketchikan Pulp Company (KPC) during the close-out of KPC's long-term timber contract; and 3) timber made available for purchase from State and privately owned lands. The sequence of activities needed to move federal timber sales through various stages of sale preparation is referred to as the "pipeline" and is referenced here to provide an indication of timber availability in future years.

The demand for timber in Southeast Alaska is determined by the number, capacity, and efficiency of wood processors in the region, the type and value of products manufactured, the technology employed in manufacturing those products, and the cost of alternative wood supplies. Ultimately, the interaction of all these factors will result in the harvest and import of timber by processors and distributors in the region.

This report monitors the volume of timber purchased, harvested, consumed and exported each year, all of which are indicators of the demand for timber in Southeast Alaska. Some of these measures necessarily include timber from non-federal suppliers in the region and timber imported from foreign or domestic sources. Because the rate at which timber is purchased and harvested depends on the demand for wood products, changes in the wood products industry in Southeast Alaska and significant developments in key markets are also documented.

Timber Supply

Tongass Timber Offerings

A total of 186.8 million board feet (MMBF) of timber was offered for sale from the Tongass National Forest in fiscal year (FY) 1998. Ninety-one timber sales were offered during the year, including 66 sales that were less than 1 MMBF in size. Most of the timber (142 MMBF) was offered during the month of September. As of September 30, 1998, 10.7 MMBF of the timber offered in FY 1998 had been sold, 41.2 MMBF received no bids, and 134.9 MMBF was pending bid opening. A final accounting for all sales offered in FY 1998 shows 18.9 MMBF of the offerings were sold, 161.3 MMBF received no bid, and 6.6 MMBF of timber was under appeal (as of 12/15/98).

The volume of timber sold in FY 1998 dropped to an all-time low of 24 MMBF. The total includes one sale (South Lindy, 10.6 MMBF) that was offered at the end of FY 1997 and awarded in FY 1998. A number factors contributed to the depressed sales volume including poor market conditions, the complete restructuring of the industry following the pulp mill closures, and changes to logging specifications required under the revised Tongass Land Management Plan. The industry relied upon the volume already under contract to maintain mill operations.

The average advertised rate for the timber offered and sold in FY 1998 was $37.59/MBF. Although the average high bid for these sales ($78.42/MBF) was nearly double the advertised rate, most of the overbid was a consequence of the amount of ineffective purchaser credit in the sales. Up to a specified limit, the Forest Service treats the road costs as the equivalent of a cash payment referred to as "purchaser credits." Ineffective purchaser credit occurs when the value of the timber in a sale does not cover the cost of the road construction. Because the successful bidder must incur the road costs anyway, buyers sometimes inflate their bids to include all or part of the construction costs. Although a larger down payment will be required, the higher bid may be enough to edge out competition for the sale. Thus, overbidding in FY 1998 was generally an anomaly of timber sale accounting practices and did not reflect the strength (weakness) of the stumpage market.

In deciding whether to purchase a sale and how much to bid for the stumpage, a potential buyer must consider the costs of logging the timber and bringing the wood to the manufacturing facility. These costs vary widely from sale to sale depending on the logging system used, the layout of the sale units and the amount of road construction needed to access the timber. On average, the sales that sold in FY 1998 had lower logging/road costs than the sales that received no bids.[1] The weighted average logging/road cost for the timber sold in FY 1998 was $291/MBF. This compares with a weighted average cost of $371/MBF for the timber that did not sell.

Every timber sale includes a different mix of timber quality and grade that will also effect the profitability of operating the sale. These differences are accounted for in an appraisal process designed to standardize timber values to common indicators of end product values. On average, the sales that sold in FY 1998 had higher product values than the sales that received

[1] Sales less than 500 MBF in size are not included in this analysis.

no bids. The weighted average selling value for the timber sold in FY 1998 was $592/MBF. This compares with a weighted average selling value of $542/MBF for the unsold sales.

As a general observation, the relatively high cost structure and low product value associated with the unsold sales made them less attractive to potential bidders. After accounting for an average manufacturing cost of $280/MBF, the estimated return to the buyer on the sales purchased in FY 1998 was +$21/MBF (assuming zero stumpage payments). In contrast, the average return for the unsold sales was -$109/MBF. Other common characteristics of the unsold sales include: 1) timing—with the exception of the Brand X sale which was advertised in June, all of the unsold volume was offered during the last few days of August or in September; 2) size—the average size of the unsold sales was 10.1 MMBF vs. an average size of 2.3 MMBF for the sales that were purchased; and 3) extent of helicopter logging—only 2 of the 9 sales purchased in FY 1998 required 40-60% of the timber to be removed with helicopter logging while 11 out of 15 of the unsold sales had this requirement (7 of these sales required 60% or more of the sale to be logged by helicopter). Table A-1 provides more information about the individual sales offered in FY 1998.

Volume Under Contract

Purchasers of National Forest timber started the fiscal year with approximately 498 MMBF of timber under contract. Of this, 253 MMBF was under contract to independent purchasers and 245 MMBF was associated with the KPC long-term contract (Table A-13). At the end of the fiscal year, the volume of timber under contract to independent mills declined to 229.3 MMBF while KPC's volume under contract dropped to 166.1 MMBF.

The aggregate volume under contract to independent purchasers has a weighted average logging/road cost of $331/MBF ($249/MBF logging + $81/MBF specified roads). This is roughly $40/MBF higher than the estimated costs for the sales purchased in FY 1998. The average bid values for these sales included an additional $50/MBF in net stumpage payments. However, continued weakness in the timber market may trigger emergency rate re-determinations, potentially reducing this component of overall cost. Even so, assuming delivered wood costs of $331/MBF, timber values of $592/MBF, and average manufacturing costs of $280/MBF, the return to the operator would be -$19/MBF. Under these assumptions, the market must improve by a minimum of $20/MBF before the purchaser begins to offset risk and accumulate profit.

The situation is a bit different for KPC. Under a February 1997 settlement agreement, KPC was allowed to complete the harvest of an estimated 320 MMBF of timber previously released to the company. As part of the agreement, KPC paid the federal government approximately $7.5 million in stumpage (roughly $20/MBF). The federal government agreed to reimburse KPC for the costs of building the roads to access this timber. In this case, the net cost to KPC of harvesting the remaining volume under contract can be approximated by the average logging cost plus the stumpage payment collected as part of the settlement agreement. For the offerings remaining, this equates to $229/MBF. Assuming the same selling values and manufacturing costs used above, this would yield an estimated return of $63/MBF for the timber most likely to be harvested in FY 1999.

Status of the Tongass Timber Pipeline – Timber Supply Outlook

At any point in time, varying amounts of timber from the Tongass National Forest are in different stages of readiness for harvest. Each stage is referred to as a "gate", and is defined by specific activities to be completed by the Forest Service before the associated timber volume can pass on to the next gate. The sequence of gates is commonly referred to as the timber "pipeline" which serves as a link between the standing timber inventory and the sales that are available for harvest. In general, three to five years are needed to move a timber sale

through the pipeline. However, administrative appeals can prolong sale preparation time and force adjustments to out-year sale planning.

Given the extended period of time involved in planning and preparing a timber sale, the Forest Service must closely monitor the volume of timber at different stages in the pipeline to ensure that the volume delayed in one gate can be offset by volume supplied from another. At the end of FY 1998, the status of the timber pipeline was as shown in Table 1. Note that the total timber sale program involves a much greater volume of timber than the amount offered for sale each year. For example, at the end of FY 1998, the environmental analysis required under the National Environmental Policy Act (NEPA) had been completed for sales including approximately 861.4 MMBF (91.0+205.7+169.4+395.0) of timber. This equates to about four times the level of annual timber offerings in recent years. However, only a fraction of this timber is readily available to manufacturers.

At the end of FY 1998, sale preparation and layout still needed to be completed before 91 MMBF of the total "NEPA-cleared" timber sales could be advertised. An additional 205.7 MMBF of NEPA-cleared volume is under litigation and not available to purchasers. Of the 186.8 timber offered in FY 1998, 17.4 MMBF was sold, no bids were received on 41.2 MMBF, and the remaining 128.2 MMBF was awaiting bid opening. A total of 395 MMBF of timber was under contract, most of which had been offered and awarded in prior years. Of this amount, 10.6 MMBF was under court injunction and 6.6 MMBF was under administrative appeal.

TABLE 1. Tongass Timber Pipeline September 30, 1998

	KPC	Independent	Total
Notice of Intent Issued		1,152.0	1,152.0
Decision Notice Issued (not under appeal)		91.0	91.0
Litigation (decision pending):			
Ushk Bay *(Friends of Southeast's Future v. Morrison)*		67.0	67.0
Northwest Baranof EIS *(Sitka Tribe of Alaska v. Morrison)*		66.7	66.7
Eight Fathom EIS *(Hoonah Indian Association v. Morrison)*		44.0	44.0
South Lindenburg EIS *(Narrows Conservation Coalition v. Grantham)*		28.0	28.0
SUBTOTAL		205.7	205.7
Appealed (decision pending):			
The only decisions pending at the end of FY 98 were on FY 98 offerings. See below.			
Offered FY 1998 and:			
No Bid, Appeal Decision Pending (Crane/Rowan EIS)		28.6	28.6
No Bid, "Shelf Volume"		12.6	12.6
Bid Opening in FY 99		128.2[2]	128.2[2]
SUBTOTAL		169.4	169.4
Volume Under Contract: (see Table A-x for individual sales)			
Awarded FY 98		21.3	21.3
Awarded FY 98 Pending Appeal Decision (Nemo Loop T.S)		6.6	6.6
Awarded Prior to FY 98 - Available	166.0	190.4	367.0
Awarded Prior to FY 98 - Enjoined		10.6	
SUBTOTAL	166.0	229.0	395.0
Total Pipeline Volume	166.0	1,847.1	2,013.1

NEPA-Cleared

[2] Update: 8.2 MMBF of this timber was sold in FY 99. No bids were received for the remaining 120 MMBF. Some of these sales will be re-offered in FY 1999.

Southeast Alaska Native Corporations

The 1971 Alaska Native Claims Settlement Act established thirteen Native Corporations in Southeast Alaska and entitled them to select some 600,000 acres of land from the Tongass National Forest. Approximately 10 percent of the non-reserved standing timber volume in the region was conveyed to these corporations. Since 1983, timber removals from Native Corporation lands have exceeded the level of harvest on the Tongass National Forest. To-date the Alaska Native Corporations have not invested in wood processing facilities in Alaska and most export-quality logs are shipped to foreign destinations.

Following the closure of the Ketchikan pulp mill in 1997, Sealaska, the Southeast Regional Native Corporation, began discussions with Louisiana Pacific about the possibility of forming a joint venture to manufacture veneer and other wood products. The old pulp mill site could potentially house a sawmill/veneer mill complex designed to manufacture both public and private timber supplies. Although the joint venture idea was abandoned in the fall of 1998, Sealaska is reportedly continuing to investigate wood products and markets that could serve as viable alternatives for some of the corporation's log export trade.[3]

State Timberlands

The Department of Natural Resources Division of Forestry manages the state's commercial forestlands, including approximately 65,500 acres in Southeast Alaska. The Division encourages local manufacturing of State timber and makes commercial timber offerings through the following programs:

- Competitive sales offered by sealed bid or oral auction (AS 38.05.120)
- Negotiated sales of up to 500 MBF for one year (AS 38.05.115)
- Negotiated sales in areas with high unemployment, under-utilized mill capacity, and under-utilized allowable cut (AS 38.05.118)
- Negotiated sales of up to 10 MMBF per year for up to 10 years specifically for "high value-added" processing (AS 38.05.123)

In 1996, the Governor introduced legislation to establish a "high value-added" timber sale program for the State. As set forth in AS 38.05.123, this program is intended to provide a more secure timber supply for local mills and to increase the number of Alaskan jobs supported by the State's timber resources. It allows the Division of Forestry to negotiate larger timber sales with stronger requirements for in-state processing. By regulation, timber sold under this program cannot be harvested until the associated processing facilities are operational. The 4.3 MMBF Kitkun timber sale on Prince of Wales Island was one of the first sales offered under this program. It was awarded to Seley Family, Ltd. in June 1998.

During (State) fiscal year 1998 (7/1/97-6/30/98) the Division put 34 timber sales up for bid in Southeast Alaska during. Most of these were salvage sales, less than 10 acres and 500 MBF in size. The Division of Forestry breaks Southeast Alaska into three regions or "Areas". The total sale volume proposed for the Ketchikan Area in (State) FY 1999 is 9.9 MMBF. The Juneau Area is scheduled for 3.4 MMBF in sale volume and 9.9 MMBF of sales are planned for the Haines State Forest. Unless market conditions improve, the actual level of timber sale offerings is likely to be much lower. A notable exception is the increasing demand for small sales (less than 10 acres in size) from operators located on Prince of Wales Island.

[3] "Sealaska and LP will not form their joint venture", Island News, September 14, 1998, pg. 1.

Log and Chip Imports

In recent years, only minor log import activity has occurred in Southeast, in part due to higher log prices. Also, in response to growing land use conflicts, the need for watershed protection, and increased resistance to clearcutting, the Canadian government has prohibited round-log export and encouraged the manufacture and sale of finished wood products. Absent the pulp mills, currently there is no local market for the type of low-end logs that found their way into Southeast's timber market in prior years and log imports are expected to be minimal in future years.

Timber Demand

The following pages provide information about the volume of timber harvested, consumed, and exported from within Southeast Alaska, all of which are indicators of timber demand. Some of these measures necessarily include timber from State and private forestlands in the region and timber imported from foreign or domestic sources. In addition, the rate at which timber is purchased and harvested ultimately depends on the demand for wood products.[4] Thus, changes in the wood products industry in Southeast Alaska and trends in key wood product markets are also reviewed here.

This report is intended to monitor timber markets and makes no attempt to speculate about what may have transpired if the numerous factors influencing timber and wood product demand had somehow been altered. As a result, it is technically a report on the quantity of timber demanded in FY 1998, given the cost of alternative supplies and the prevailing market conditions.

Timber Harvest Activity

Tongass National Forest

Timber sale operators harvested 107.6 MMBF of sawtimber and 12.2 MMBF of utility-grade logs for a total harvest volume of 119.8 MMBF in FY 1998. The amount of timber harvested under the KPC long-term contract (79.8 MMBF) increased 16 percent from FY 1997 harvest levels. Timber harvest under the independent sale program (40.0 MMBF) increased only slightly.

Southeast Alaska Native Corportations

As shown in Table A-7, since 1987, more than half the timber harvest activity in Southeast Alaska has occurred on private lands owned by Southeast Alaska Native Corporations. Log export statistics from the U.S. Department of Commerce and (when applicable) production data supplied by the pulp companies were used to generate the annual harvest estimates reported here. These figures indicate that the volume of timber harvested by the Native Corporations peaked at 530 MMBF in 1989 and has since declined to around 215 MMBF.

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[4] The demand for wood products from a particular supplier depends on the competitive position of that supplier. Other things being equal, relatively high raw material costs put Alaska's manufacturers at a competitive disadvantage.

State of Alaska

A total of 5.6 MMBF of sawlogs and 1.9 MMBF of utility logs were harvested from State timberlands in FY 1998. Several small timber businesses depend on the State's timber program for their wood supply, although it accounts for only 2 to 3 percent of annual timber harvest in the region. The State's timber supply has become increasingly important to local economies, as the Knowles administration has emphasized and encouraged local processing of the timber sold.

National Forest Log Exports

Logs harvested from National Forests in Alaska cannot be exported without the prior approval of the Regional Forester (36 CFR 223.201). Historically, western red cedar and Alaska yellow cedar logs were not consumed in local mills and export permits for these relatively minor species were routinely approved. However, in recent years, buyers have expressed interest in keeping some western red cedar in the region for local processing. Accordingly, Section 347 of the Fiscal Year 1998 Department of Interior and Related Agencies Appropriation Act directed the Forest Service to allow only what is surplus to the needs of local processors to leave the State. Further, the Act stated that a percentage of this "surplus" western red cedar must be made available to domestic processors within the contiguous 48 states before it is offered to foreign markets.

The draft procedures implementing this Congressional mandate were circulated for public comment in March 1998. The procedures were finalized and published as a Regional Supplement to the Forest Service Manual in July 1998 (ID 2450-98-1). This directive also clarified Regional policy pertaining to the export of utility logs originating from National Forest Lands in Alaska. Simply put, under the new direction, utility and western red cedar logs are initially to be appraised to the local Alaskan market. If a buyer can demonstrate the lack of a local market for such material, the timber is to be re-appraised for export to markets outside Alaska.

In FY 1998, new export permits were approved for a total of 19.4 MMBF of Tongass timber. This included 5.3 MMBF of Alaska yellow cedar, 1 MMBF of western red cedar, 1 MMBF of Sitka spruce sawlogs, 7.5 MMBF of western hemlock sawlogs, and 4.6 MMBF of utility logs. The bulk of the hemlock sawlogs were shipped by KPC to a veneer mill in Oregon for product development and testing.

Also in FY 1998, extensions of export permits issued in prior years were granted for roughly 14.8 MMBF of Tongass timber, including .9 MMBF of Alaska yellow cedar, .4 MMBF of western red cedar, 2.4 MMBF of Sitka spruce sawlogs, 8.6 MMBF of western hemlock sawlogs, and 2.5 MMBF of utility logs. Applications for export permit extensions frequently cite the original volume requested for export and make no deduction for timber already shipped. Because of the way this information is collected and reported, it is not possible to tell what portion of the material has already been exported.

Finally, several export permits issued in prior years were still in effect during FY 1998. The total volume authorized under these permits was 77.9 MMBF. The species and grade breakdown includes 30.7 MMBF of Alaska yellow cedar, 12.4 MMBF of western red cedar, 2.8 MMBF of Sitka spruce sawlogs, 23.1 MMBF of western hemlock sawlogs, and 8.9 MMBF of utility logs. The bulk of the cedar was included in export authorizations for large timber offerings released to KPC. Again, these figures include all timber authorized for export and have not been adjusted for shipments that may have occurred after they were issued.

Table A-4 lists the permits approved in FY 1998, as well as permits from prior years that were still active in FY 1998. Permit holders must report the volume of logs exported each year. This information has been compiled and sorted by species and destination for calendar years 1995 through 1998 (Table A-5). In CY 1998, a total of 23.5 MMBF of logs were exported from the Tongass National Forest. The cedar species accounted for 53 percent of the material shipped.

Alaskan Wood Products Trade

The combined value of Alaskan wood product exports fell to $207 million in FY 1998--less than half the total market value in FY 1997 (Table A-6). The loss of the dissolving pulp sector in Alaska's trade portfolio together with a strong decline in the volume and value of log exports reduced the value of Alaska's wood products trade to an all-time low. At $506/MBF, log export values declined for the third consecutive year, dropping another 22 percent relative to last fiscal year. Lumber values also reflected troubled financial markets abroad. At $571/MBF, lumber export values were down 3 percent from last fiscal year. The volume of lumber exported dropped to a decade low of 13 MMBF. This marks the fifth consecutive year of decline in Alaska's lumber export trade. Producers have been able to offset some of these losses by shifting product to the domestic market.

Japan remains the primary market for Alaska's wood product exports, accounting for 67 percent of the total dollar value in FY 1998. Ninety-three percent of the dollar value of lumber exports was sent to Japan in FY 1998 (Table A-8). Considerably smaller shipments were sent to Taiwan and Canada, the only other sizeable foreign destinations for Alaska's lumber. Japan also purchased most of Alaska's log exports, receiving 69 percent of the total dollar value in FY 1998. South Korea (16 percent), China (14 percent), and Taiwan (3 percent) were other primary destinations (Table A-9).

TABLE A-1.

Tongass Timber Sale Offerings FY 1998

Name	Date Advertised	Selling Value SV ($/MBF)	Logging Cost LC ($/MBF)	Road Cost RC ($/MBF)	Manu-facturing Cost MC ($/MBF)	Net Value = SV-LC-RC-MC	Adver-tised Rate	High Bid	Number of Bidders	Spruce (%)	Hemlock (%)	Yellow Cedar (%)	Red Cedar (%)	Total Volume (MBF)	High Bidder
STIKINE															
Bo	5/14/98	$480.62	$181.89	$3.16	$288.64	$7.33	$2.86	$3.84	2	17	83	0	0	1,305	Viking Lumber
Clover	9/22/98	$493.04	$261.29	$133.93	$281.27	-$183.45	$5.17	No Bid	0	18	75	7	0	17,364	No Bid
Crane	9/3/98	$514.72	$215.52	$90.53	$297.89	-$89.22	$4.53	No Bid	0	25	73	2	0	8,420	No Bid
Etolin	6/11/98	$767.48	$216.42	$8.02	$287.82	$255.22	$167.79	$176.06	1	14	45	9	32	2,138	Silver Bay
Nemo	9/22/98	$623.88	$236.37	$71.28	$289.81	$26.43	$29.92	$121.70	2	40	27	9	24	6,626	Silver Bay
Rowan Mt.	9/22/98	$533.62	$282.61	$30.58	$293.55	-$73.03	$5.36	No Bid	0	30	66	4	0	20,221	No Bid
S. Lindy SS1	9/22/98	$476.44	$225.42	$0.00	$288.53	-$37.51	$3.94	$15.79	4	23	61	16	0	1,675	Silver Bay
Todahl Backline	9/8/98	$529.84	$376.36	$11.31	$296.76	-$154.59	$5.07	No Bid	0	30	67	3	0	7,877	No Bid
Turn	10/30/97	$556.06	$183.19	$179.50	$268.43	-$75.06	$60.72	$60.72	1	29	58	12	1	1,720	Silver Bay
Sales < 500 MBF														1,398	
CHATHAM															
Rodman Bay	9/29/98	$498.73	$347.28	$27.82	$266.20	-$142.57	$6.88	No Bid	0	25	65	10	0	30,940	No Bid
Water World	11/28/97	$533.83	$398.80	$0.00	$277.99	-$142.96	$2.91	No Bid	0	26	67	7	0	8,667	No Bid
Sales < 500 MBF														880	
KETCHIKAN															
Big Bob	8/28/98	$635.16	$403.83	$112.46	$229.90	-$111.03	$11.99	No Bid	0	18	48	33	1	7,163	No Bid
Big Salt	9/24/98	$567.88	$308.64	$228.84	$283.28	-$252.86	$8.88	No Bid	0	27	57	9	7	8,243	No Bid
Brand X	6/1/98	$530.16	$287.71	$38.17	$276.43	-$72.15	$4.82	No Bid	0	15	77	3	5	1,846	No Bid
Cable Drop	8/24/98	$581.51	$299.60	$43.86	$271.76	-$33.70	$10.62	No Bid	0	21	51	9	7	11,842	No Bid
Cloudy	5/15/98	$582.96	$248.77	$25.75	$262.70	$45.73	$12.27	$36.35	2	20	63	10	7	2,788	Seley
Control Center	9/24/98	$601.61	$248.23	$169.30	$285.91	-$101.83	$16.20	$19.55	1	27	61	12	0	1,195	Viking Lumber
Dumpy ATC	9/5/98	$576.22	$291.25	$77.89	$301.05	-$93.97	$9.86	No Bid	0	19	55	5	21	19,824	No Bid
Hard Steel	9/24/98	$523.90	$317.71	$103.39	$275.99	-$173.18	$8.94	No Bid	0	12	66	13	9	4,766	No Bid
North Thorne	9/24/98	$549.60	$250.40	$110.05	$302.65	-$113.50	$11.32	$21.93	1	10	54	4	32	2,304	Viking Lumber
Peep Rock	11/15/97	$529.04	$158.70	$89.17	$296.48	-$15.32	$23.03	$110.73	1	17	80	0	3	1,531	Seley
Picasso	8/25/98	$700.10	$257.92	$53.30	$294.20	$94.68	$75.36	$85.20	1	53	32	12	3	608	Seley
Rio Beaver	9/24/98	$615.43	$300.78	$96.79	$279.54	-$61.69	$14.25	No Bid	0	15	43	15	27	5,579	No Bid
Rush Angel	9/24/98	$550.53	$330.63	$197.76	$284.66	-$262.52	$9.36	No Bid	0	14	58	10	18	5,834	No Bid
Rush Fast	9/24/98	$432.96	$220.68	$119.88	$228.28	-$135.88	$12.22	No Bid	0	8	43	7	42	789	No Bid
Summit/Exchange	8/28/98	$618.82	$318.37	$186.80	$258.40	-$144.75	$12.71	No Bid	0	21	45	21	13	11,023	No Bid
Twin Mt. Salvage	12/17/97	$511.08	$181.98	$0.00	$290.31	$38.79	$2.42	$38.28	2	28	72	0	0	653	Little Bit Logging
Wolf Pup	9/24/98	$467.35	$299.19	$237.04	$237.86	-$306.74	$7.99	No Bid	0	20	61	10	9	1,209	No Bid
Sales < 500 MBF														584	

Appendix Tables

TABLE A-2.

Employment in the Wood Products Industry[1]

Southeast Alaska, Fiscal Years 1981-1998

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Tongass Logging[2]	267	335	574	513	559	692	862	1,010	1,166	1,123	872	788	754	621	702	804	823	579
Sawmill	605	540	429	395	363	331	375	468	478	500	604	538	447	515	301	230	184	284
Pulp Mill	1,081	975	854	700	580	772	861	892	925	899	911	910	859	533	516	524	318	96
Tongass-Related Direct Employment[3]	1,953	1,850	1,857	1,608	1,502	1,795	2,098	2,370	2,569	2,522	2,387	2,236	2,060	1,669	1,519	1,558	1,325	959
Other Logging	780	656	436	433	445	547	683	971	947	1,021	682	627	590	556	483	353	226	310
Total Direct Industry Employment	2,733	2,506	2,293	2,041	1,947	2,342	2,781	3,341	3,516	3,543	3,069	2,863	2,650	2,225	2,002	1,911	1,551	1,269
Total Indirect Employment[4]	2,125	1,950	1,800	1,600	1,500	1,825	1,950	2,350	2,550	2,570	2,226	2,077	1,935	1,624	1,461	1,395	1,132	926
TOTAL DIRECT + INDIRECT EMPLOYMENT	**4,858**	**4,456**	**4,093**	**3,641**	**3,447**	**4,167**	**4,731**	**5,691**	**6,066**	**6,113**	**5,295**	**4,940**	**4,585**	**3,849**	**3,463**	**3,306**	**2,683**	**2,195**

[1] Includes employment related to the harvest and processing of timber from all ownerships in Southeast Alaska. According to the Alaska Department of Labor, non-residents accounted for 40.1% of timber industry employment in 1997.

[2] Estimate. Based on the ratio of Tongass timber harvest to total timber harvest in Southeast Alaska.

[3] Assumes all employment in sawmills and pulp mills is dependent on Tongass timber supply. Source: Alaska Department of Labor and USDA Forest Service, Region 10, Ecosystem Planning and Budget

[4] Jobs related to logging and milling operations, such as road construction and stevedoring are counted as indirect employment. Two computer simulation models (IPASS and IMPLAN) were used to estimate indirect employment. The distinction between direct and indirect employment is a function of the Standard Industrial Classification (SIC) System used nationally for the collection and grouping of economic statistics. For purposes of this report, the wood products "industry" is defined as logging, sawmills, and pulp mills. Persons employed in these businesses are reported here as "direct" employment. "Indirect" employment refers to the persons employed in all businesses supporting operation of the wood products industry. Other indirect jobs are supported when industry employees spend their take-home pay in local communities.

TABLE A-3.
Volume of Timber Offered, Sold, and Harvested
Tongass National Forest, Fiscal Years 1988-1998
(million board feet, net sawlog + utility)

	Short-Term			Long-Term Contracts[1]			Program Total				
	Offer	Sold	Harvest	Prepared	Released	Harvest	Offer/ Prepared	Re-Offer	Total Offer	Sold/ Released	Harvest
1988	92	70	100	365	266	296	387	30	417	336	396
1989	93	92	142	276	198	303	369	2	371	290	445
1990	54	26	173	331	287	298	385	22	407	313	471
1991	79	52	90	318	354	273	397	35	432	405	363
1992	40	81	72	449	357	298	489	27	516	429	370
1993	61	45	55	257	303	270	318	32	350	348	325
1994	100[2]	52	48	207[3]	217[3]	228	307	30	337	269	276
1995	110[4]	102[2]	59	217[5]	159	162	327	0	327	261	221
1996	58	69	27	192	158	93	250	31	281	227	120
1997	138	152	37	50	50	69	188	6	194	202	107
1998	186	24	40	0	0	80	186	14	200	24	120

[1] The activities related to the long-term contracts are somewhat different than those of the short-term sale program. The following clarifications are provided in reference to the figures provided above.
Volume Offered: Under the short-term sale program, this refers to advertised volume. The volume fully prepared and available is reported here as a comparable measure for the long-term contracts.
Volume Sold: Under the short-term sale program, this refers to volume awarded to purchasers. The volume formally released to contract holders is reported here as a comparable measure for the long-term contracts. Timber is counted as being released under the long-term contracts when a timber offering has been accepted by the purchaser.
[2] 53.8 MMBF enjoined by court decision in *AWRTA v. Morrison*
[3] 40.9 MMBF enjoined by court decision in *AWRTA v. Morrison*
[4] 67.7 MMBF enjoined by court decision in *AWRTA v. Morrison*
[5] 57.8 MMBF enjoined by court decision in *AWRTA v. Morrison*

TABLE A-4. Tongass National Forest Log Export Permits Issued and/or Effective FY 1998

Date	Permit #		Sale Name	Permit Holder	Comments	Volume (MBF)					
						Yellow Cedar	Red Cedar	Spruce Sawlogs	Hemlock Sawlogs	Utility Logs	Total
Permits Issued In FY 1998											
2/5/98	1	K	Upper Carroll	Silver Bay Logging	Approved. S/H logs <16" small end.	500	1,000	500	1,500	3,000	6,500
2/5/98	2	K	Sentinal	Seley Family Ltd.				105	415	525	1,045
2/4/98	3	C	Hanus ATC	Silver Bay Logging	Approved. Sawlog max dia. 11" small end.	200		200	450	1,000	1,850
2/4/98	4	C	Humpback/Gallagher	Whitestone Logging	Extension. Permit #67 CY 97.			2,000	8,000		10,000
3/4/98	5	K	Foggy Timber Sale	Metlakatla Tribal Ent.	Extension. Permit # CY 97. Upward adjustment of 63 MBF.	178	312	50	150	200	890
2/27/98	6	S	Deep Bay North	Metlakatla Tribal Ent.	Extension. Permit # CY 97. Price quotes submitted.			152	97		249
2/27/98	7	S	Deep Bay North	Metlakatla Tribal Ent.	Extension. Permit #51 CY 97. Price quotes submitted.					946	946
2/25/98	8	S	Deep Bay North	Metlakatla Tribal Ent.	Extension. Permit # CY 97.	254	1				254
3/4/98	9	S	Pathway Salvage	Gateway Timber	Extension. Permit # CY 97.	110					110
3/10/98	10	K	Ketchikan Pulp Company	A10fs-1042	Extension. Permit #64 and #65 CY 97.				1,370	2,600	3,970
3/16/98	11	K	Twin Mountain Salvage	Little Bit Logging	Approved. Export of spruce logs cut into music wood flitches.			75			75
	12	C	Saook Bay	Silver Bay Logging	Not Approved. Permit #72 CY 97 is still in effect. This request would have modified that permit to allow export of an additional 4 MMBF of sawlogs.	300		3,000	5,000	6,800	15,100
3/16/98	13	S	Shamrock	Viking Lumber Co.	Approved.	2,000					2,000
3/16/98	14	S	Bohemia	Viking Lumber Co.	Approved.	1,000					1,000
3/16/98	15	K	Big Whaler Log Stringer	Soundwood Company	Extension. Permit #68 CY 97.			4			4
3/4/98	16	S	Pathway Salvage	Gateway Timber	Extension. Permit #32 CY 97.		40				40
3/31/98	17	S	One Ring	Age Cedar Products	Approved.	13					13
7/10/98	18	S	Little Hamilton Salvage	Thorne Bay Lumber Ent.	Approved.	73					73
7/20/98	19	K	Southfork Salvage	Jerry Jones	Approved.	20					20

8/10/98	20	K	Ketchikan Pulp Company	A10fs-1042	Approved. S/H sawlog 10-23" small end die. to test veneer manufacture.				5,000		5,000
8/10/98	21	K	South McKenzie	Silver Bay Logging	Approved. Request to test new mkt.			100			100
8/25/98	22	K	Southfork Salvage	Jerry Jones	Approved.					9	9
8/25/98	23	K	Southfork Salvage	Jerry Jones	Approved. Price quotes submitted.		12				12
9/3/98	25	K	Steelhead Logdeck	Mel Cook	Approved.	10					20 ccf
10/13/98	26	C	Tributary	D&L Woodworks	Approved. Price quotes submitted.					50	50
10/19/98	27	C	Suntaheen	Whitestone Logging	Approved. S/H <12" small end +utility. Price quotes submitted.			13	9	28	50
10/19/98	28	C	One-Two-Three	Whitestone Logging	Approved. S/H <12" small end +utility. Price quotes submitted.			4	2	8	14
10/13/98	29	S	Sumner Salvage	The Mill, Inc.	Extension. Permit #59 CY 96 and #5 CY 97.	300					300
10/13/98	30	S	Sumner Salvage	The Mill, Inc.	Extension. Permit #59 CY 96 and #5 CY 97.					1,342	1,342
10/13/98	31	S	Rowan Settlement	Rayonier, Inc.		595					595
10/13/98	32	S	Loft Timber Sale	The Mill, Inc.	Extension. Permit #7 CY 97.			200	300		500
10/13/98	33	S	Little Hamilton Salvage	Thorne Bay Lumber	Extension. Permit # . S/H <11" small end.			30			60
10/13/98	34	S	Little Hamilton Salvage	Thorne Bay Lumber	Extension. Permit # . S/H <11" small end.				60		60
10/13/98	35	S	Karena	The Mill, Inc.	Extension. Permit #4 CY 97.	6					6
10/13/98	36	S	11-Mile Blowdown	The Mill, Inc.	Extension. Permit #62 CY 96.					25	25
10/13/98	37	S	ATC	Rayonier, Inc.	Approved.	878					878
10/17/98	38	K	Kwati	Pat Richter	Approved. S/H 16" or less small end + utility. Price quotes submitted.				100		100
10/26/98	39	K	Greens Creek Settlement	Greens Creek Mining	Approved. S/H <=11" small end +utility. Price quotes submitted.			5	10		15
10/26/98	40	K	Cutlog Cedar Salvage	Andy Weber		40					80 ccf
10/28/98	41	K	Tie Timber Sale	Cape Fox Corp.	Approved. S/H 16" or < small end +utility.	6	22	1	3	2	34
Permits Issued Prior to FY 1998											
2/21/97	14	K	Offerings 16,17,22-25,28,31-36	Ketchikan Pulp Co.	Approved.		9,821				9,821
2/21/97	15	K	Offering 17 S. Margaret	Ketchikan Pulp Co.	Approved.	1,650					1,650
2/21/97	16	K	Offering 22 Trumpeter 6	Ketchikan Pulp Co.	Approved.	221					221
2/21/97	17	K	Offering 23 Bushy Chin	Kethickan Pulp Co.	Approved.	1,589					1,589
2/21/97	18	K	Offering 35 West Polk	Ketchikan Pulp Co.	Approved.	4,168					4,168
2/21/97	19	K	Offering 33 Big Dewey	Kertchikan Pulp Co.	Approved.	3,712					3,712

2/21/97	20	K	Offering 32 N. Thorne/Little Ratz	Ketchikan Pulp Co.	Approved.	3,447					3,447
2/21/97	21	K	Offering 31 KHS	Ketchikan Pulp Co.	Approved.	3,660					3,660
2/21/97	22	K	Offering 26 Thorne Bay II	Ketchikan Pulp Co.	Approved.	1,421					1,421
2/21/97	23	K	Offering 25 East Polk	Ketchikan Pulp Co.	Approved.	1,720					1,720
2/21/97	24	K	Offering 24 Little Coal Bay	Ketchikan Pulp Co.	Approved.	2,382					2,382
2/21/97	25	K	Offering 34 Naukati/Sarkar	Ketchikan Pulp Co.	Approved.	398					398
2/21/97	26	K	Offering 36 E. 12-Mile	Ketchikan Pulp Co.	Approved.	3,109					3,109
4/2/97	31	K	South McKenzie	Silver Bay Logging	Approved.	1,500	2,500			300	4,300
6/6/97	49	C	Hanus ATC	Silver Bay Logging	Approved. S/H sawlogs <=11' sma;ll end	1,200		300	1,200	2,500	5,200
7/15/97	53	K	Bubba Gump Cedar Salv.	Jerry Jones	Approved.	40	20				60
10/10/97	64	K	Long-term Sale Offering	Ketchikan Pulp Co.	Approved. Testing veneer manufacture.				6,000		6,000
10/10/97	65	K	Long-term Sale Offering	Ketchikan Pulp Co.	Approved. Export of utility only.					3,000	3,000
10/6/97	67	C	Humpback/Gallagher	Whitestone Logging	Approved. S/H sawlogs max diam of 16" small end.			2,000	8,000		10,000
11/21/97	69	S	Lower Big Creek	Little Bit Logging	Approved. 90% of WRC permitted for export.	27	85				112
12/8/97	70	S	Saginaw	Rayonier, Inc.	Approved. S/H sawlogs <=22" small end in accordance w/terms of agreement between Forest Service and Rayonier dated 9/4/97.					3,077	3,077
12/8/97	71	S	Saginaw	Rayonier, Inc.	Approved. See above.			480	7,889		8,369
12/8/97	72	S	Saginaw	Rayonier, Inc.	Approved.	451					451

TABLE A-5. Tongass National Forest Log Exports – CY 1995-1998

Date	Location	Volume Shipped					
		AYC	WRC	SS	WH	Other	Total
CY 1995	Canada		101	162	766		1,029
	Japan	14,132	22,202	30	53		36,418
	Korea		40				40
	Taiwan		3				3
	Washington	144	1,297	13			
	Not Reported	728		34	194		955
	TOTAL	15,003	23,643	240	1,013		39,899
CY 1996	Canada	155	113	3	7		279
	Japan	7,391	5,714	516	127		13,747
	Korea		12		10		22
	Taiwan	1	560				561
	Washington	118	300	743	1,617	30	2,808
	Not Reported	6					6
	TOTAL	7,670	6,699	1,262	1,762	30	17,423
CY 1997	Canada	17		3,625	5,247		8,889
	Japan	7,200	3,977	1,464	2,859		15,500
	Korea		761	14	160		935
	Taiwan	338	3,527	174	162		4,201
	Oregon	4		5	4,668		4,676
	Washington	9	3,321	8	131		3,469
	Not Reported	225	380	26	106		737
	TOTAL	7,793	11,967	5,316	13,332		38,407
CY 1998	Canada	45	1,189	787	2,384		6,448
	Japan	4,777	213	54	105		5,149
	Korea	0	0	33	193		226
	Taiwan	1,291	1,971	1	17		3,279
	Oregon	0	0	29	4,522		4,552
	Washington	313	2,647	163	403		3,868
	Not Reported			18	1		19
	TOTAL	6,426	6,020	1,085	7,625		23,541

TABLE A-7.
Timber Harvest and Imports for Southeast and Southcentral Alaska
Fiscal Years 1981-1998[1]

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Southeast Alaska													
Tongass N.F.	Sawlogs	282.0	331.5	377.0	399.0	299.6	303.1	268.3	221.8	181.3	97.4	94.4	107.6
	Utility Logs	54.2	64.7	67.6	72.0	64.6	66.6	56.7	54.0	39.8	22.8	12.2	12.2
State of Alaska	Sawlogs	19.5	16.8	11.4	11.1	4.0	14.9	5.0	18.1	3.6	4.5	5.2	5.6
	Utility Logs	0.3	0.1	0.1	1.0	0.0	0.1	0.0	2.7	2.2	2.5	0.3	1.9
BIA		0.0	0.0	3.5	0.0	7.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0
Alaska Native Corporations[2]	Sawlogs	282.5	277.0	419.8	433.7	307.2	348.7	328.2	275.0	233.9	292.4	335.9	157.6
	Utility Logs	121.5	118.1	112.1	72.4	147.4	97.0	82.2	12.3	81.1	37.7	47.6	59.0
Total Southeast Harvest	Sawlogs	584.0	625.3	811.7	843.8	618.3	671.2	601.5	514.9	418.8	394.3	435.5	270.8
	Utility Logs	176.0	182.9	179.8	145.4	212.0	163.7	138.9	69.0	123.1	63.0	60.1	73.1
	Total	760.0	808.2	991.5	989.2	830.3	834.9	740.4	583.9	541.9	457.3	495.6	343.9
Southcentral Alaska													
Chugach N.F.	Sawlogs	0.7	1.0	1.1	1.1	1.1	0.5	1.7	0.0	1.1	1.3	0.8	0.8
	Utility Logs	0.0	0.0	0.4	0.4	0.4	0.0	0.0	6.5	0.8	2.0	1.4	0.7
State of Alaska	Sawlogs	1.1	0.5	0.5	0.4	1.7	0.8	0.0	0.0	2.6	8.1	8.6	5.0
	Utility Logs	0.8	1.6	1.6	0.6	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.1
Alaska Native Corporations[2]	Sawlogs	44.2	79.2	120.0	105.1	134.5	123.5	127.2	186.0	210.6	199.6	197.4	88.7
	Utility Logs	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0	19.5	8.0	39.7	83.5
Total Southcentral Harvest	Sawlogs	46.0	80.7	121.6	106.6	137.3	124.8	128.9	186.0	214.3	209.0	206.8	94.5
	Utility Logs	0.8	8.0	2.0	1.0	1.2	0.2	0.0	6.5	20.3	10.0	41.1	84.3
	Total	46.8	88.7	123.6	107.6	138.5	125.0	128.9	192.5	234.3	219.0	247.9	178.8
Alaskan Imports	Sawlogs	5.7	0.1	1.8	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Utility Logs	5.1	6.8	1.9	0.0	0.0	3.0	3.0	3.0	11.5	34.1	0.0	0.0
	Chips[3]	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0

[1] The federal fiscal year begins on October 1st.
[2] Estimated from trade statistics and data provided by local mills.
[3] Compiled from official statistics reported by the U.S. Department of Commerce. Cords of utility logs are converted to log scale at a rate of 2 cords/MBF. Metric tons are converted to log scale at a ratio of 2.7 tons per MBF.

TABLE A-6.
International Exports of Alaskan Wood Products
Fiscal Years 1981-1998

Product/Unit[1]	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
SOFTWOOD LOGS																		
Volume (MMBF)	130.1	197.5	292.6	237.6	258.6	340.3	436.1	482.2	629.6	606.6	516.9	537.4	500.2	518.9	542.7	550.9	585.9	373.4
Value ($/MM)	68.4	95.4	128.3	97.1	99.6	137.9	179.6	261.6	310.3	350.9	293.9	327.4	362.6	391.7	347.7	390.0	381.9	188.8
Unit Value($/MBF)	526	483	439	408	385	405	412	543	493	578	569	609	725	755	641	708	652	506
Inflation Adjusted ($98/MBF)	927	793	692	616	560	572	565	719	625	703	662	689	802	819	683	739	666	506
LUMBER AND CANTS																		
Volume (MMBF)	202.5	178.6	136.0	113.3	122.0	93.5	121.0	152.5	182.3	225.5	180.7	120.8	145.2	122.7	73.3	25.9	30.8	13.1
Value ($/MM)	60.3	62.5	45.5	32.2	32.5	24.7	33.9	52.1	71.0	85.3	74.8	50.3	74.4	67.7	51.5	20.9	18.1	7.5
Unit Value($/MBF)	298	350	334	284	266	264	280	342	389	378	414	416	512	552	702	747	587	571
Inflation Adjusted ($98/MBF)	525	574	526	429	387	373	384	453	493	460	482	471	566	599	748	780	600	571
WOODCHIPS																		
Volume (Thousand Metric Tons)	60.5	84.8	19.0	10.5	4.5	0.0	0.0	10.4	77.9	18.2	87.8	19.5	41.3	69.1	102.1	166.8	107.1	135.8
Value ($/MM)	5.5	6.4	1.3	0.3	0.4	0.0	0.0	0.6	3.6	1.4	7.3	1.5	4.3	8.2	15.2	17.4	8.3	11.3
Unit Value($/Metric Ton)	90	75	66	32	98	0	0	54	46	78	83	79	105	119	149	105	77	83
Inflation Adjusted ($98/Metric Ton)	159	123	104	48	142	0	0	71	58	95	97	89	116	132	159	110	79	83
WOODPULP																		
Volume (Thousand Metric Tons)	252.9	211.0	188.5	249.5	166.5	203.8	232.0	260.4	296.9	289.3	263.8	299.2	209.5	156.8	146.5	101.6	82.9	0
Value ($/MM)	135.7	113.3	94.8	127.3	72.0	85.4	113.9	160.4	227.7	203.4	162.2	175.0	123.3	90.1	134.0	88.1	50.0	0
Unit Value($/Metric Ton)	537	601	503	510	433	419	492	616	767	703	615	585	588	575	915	867	603	0
Inflation Adjusted ($98/Metric Ton)	947	986	793	770	630	592	675	816	972	856	716	662	650	624	974	905	616	0
TOTAL VALUE ($MM)	269.9	277.6	269.9	256.9	204.5	248.0	327.4	474.7	612.7	641.0	538.2	554.2	564.6	557.7	548.4	516.4	458.3	207.6

[1] Values are free along ship (FAS) in millions of dollars. Source: Compiled from official statistics reported by the U.S. Department of Commerce (1999).

TABLE A-8.
Softwood Lumber and Cant Exports from Alaska
Fiscal Years 1988-1998[1]

VOLUME (MBF)											
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Australia	15	0	0	0	0	0	0	0	0	0	0
Canada	2,064	88	16	0	657	4	0	0	69	3	256
Hong Kong	0	24	0	0	0	0	0	0	0	0	0
Iceland	245	0	0	0	0	0	0	0	0	0	0
Ireland	0	18	0	0	0	0	0	0	0	0	0
Italy	0	38	0	0	0	0	0	0	0	0	0
Japan	145,343	180,874	211,189	169,160	117,615	135,598	116,184	72,765	25,783	29,368	10,798
Korea, South	4,305	1,099	7,022	3,203	0	8,804	1,994	1,462	0	344	0
Morocco	0	0	2,379	0	0	0	0	0	0	0	0
Netherlands	298	0	0	0	0	0	0	0	0	0	0
Saudi Arabia	0	0	2,921	3,606	0	0	0	0	0	0	0
Singapore	0	0	0	0	0	0	0	0	0	0	8
Taiwan	188	87	0	220	2,597	777	4,553	65	0	0	2,070
United Kingdom	36	94	0	0	0	0	0	0	0	0	0
World	152,504	182,322	223,527	176,189	120,869	145,249	122,731	73,291	25,853	29,715	13,132

VALUE ($M)											
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Australia	$11	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Canada	$739	$24	$5	$0	$164	$4	$0	$0	$17	$3,182	$48
Hong Kong	$0	$4	$0	$0	$0	$0	$0	$0	$0	$0	$0
Iceland	$45	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Ireland	$0	$5	$0	$0	$0	$0	$0	$0	$0	$0	$0
Italy	$0	$31	$0	$0	$0	$0	$0	$0	$0	$0	$0
Japan	$48,385	$70,309	$80,186	$70,361	$49,557	$64,734	$63,122	$49,400	$20,922	$17,561	$6,996
Korea, South	$2,754	$559	$3,281	$1,851	$0	$9,422	$3,509	$2,002	$0	$101	$0
Morocco	$0	$0	$770	$0	$0	$0	$0	$0	$0	$0	$0
Netherlands	$89	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Saudi Arabia	$0	$0	$555	$701	$0	$0	$0	$0	$0	$9	$0
Singapore	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6
Taiwan	$80	$23	$0	$88	$579	$226	$1,094	$58	$0	$0	$442
United Kingdom	$14	$29	$0	$0	$0	$0	$0	$0	$0	$0	$0
World	$52,117	$70,984	$84,797	$73,001	$50,300	$74,399	$67,725	$51,461	$20,939	$20,844	$7,493

UNIT VALUE ($/MBF)											
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Australia	$742	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Canada	$358	$272	$319	$0	$250	$1,049	$0	$0	$243	$1,061	$188
Hong Kong	$0	$169	$0	$0	$0	$0	$0	$0	$0	$0	$0
Iceland	$184	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Ireland	$0	$281	$0	$0	$0	$0	$0	$0	$0	$0	$0
Italy	$0	$813	$0	$0	$0	$0	$0	$0	$0	$0	$0
Japan	$333	$389	$380	$416	$421	$477	$543	$688	$812	$598	$648
Korea, South	$638	$509	$467	$578	$0	$0	$1,760	$1,369	$0	$294	$0
Morocco	$0	$0	$324	$0	$0	$0	$0	$0	$0	$0	$0
Netherlands	$299	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Saudi Arabia	$0	$0	$190	$194	$0	$1,070	$0	$0	$0	$0	$0
Singapore	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$691
Taiwan	$425	$265	$0	$400	$223	$291	$240	$895	$0	$0	$214
United Kingdom	$389	$308	$0	$0	$0	$0	$0	$0	$0	$0	$0
World	$342	$389	$379	$414	$416	$512	$552	$702	$747	$701	$571

[1] Compiled from official statistics published by the U.S. Department of Commerce, 1999.

TABLE A-9.
Softwood Log Exports from Alaska
Fiscal Years 1988-1998[1]

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
VOLUME (MBF)											
Australia	18	11	0	0	0	0	0	0	0	0	0
Canada	70,117	38,029	12,595	15,393	4,477	2,978	1,049	78,256	29,223	33,496	117,886
China	11,647	12,259	1,326	19,132	26,049	24,528	17,329	3,775	8,488	2,256	3,030
Germany, West	11	0	0	0	0	0	0	0	0	0	0
Hong Kong	0	0	0	0	4,505	0	0	0	0	0	0
India	0	0	0	0	0	0	0	0	0	0	3,509
Jamaica	0	0	0	4,636	0	0	0	0	0	0	0
Japan	302,594	460,792	465,152	359,842	384,553	311,200	391,911	344,599	373,467	400,460	179,943
Korea, South	86,781	108,540	109,264	94,448	90,170	135,264	84,780	94,541	120,076	134,340	59,296
Switzerland	0	0	0	0	0	0	0	0	0	0	1,490
Taiwan	8,988	9,926	18,199	23,411	27,728	26,203	23,851	21,538	0	0	8,210
Turkey	1,822	0	0	0	0	0	0	0	0	0	0
World	481,978	629,557	606,535	516,862	537,483	500,173	518,920	542,710	550,901	570,552	373,366
VALUE ($M)											
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Australia	$35	$15	$0	$0	$0	$0	$0	$0	$0	$0	$0
Canada	$9,313	$8,625	$3,924	$4,218	$2,049	$697	$597	$24,478	$10,768	$7,034	$26,366
China	$3,229	$3,735	$548	$11,072	$16,562	$15,482	$10,269	$1,530	$4,389	$1,225	$1,874
Germany, West	$17	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hong Kong	$0	$0	$0	$0	$3,528	$0	$0	$0	$0	$0	$0
India	$0	$)	$0	$0	$0	$0	$0	$0	$0	$0	$2,384
Jamaica	$0	$0	$0	$3,397	$0	$0	$0	$0	$0	$0	$0
Japan	$211,450	$252,323	$289,217	$231,217	$256,811	$256,032	$318,520	$255,998	$290,999	$292,597	$121,189
Korea, South	$33,833	$41,315	$47,518	$33,456	$33,927	$71,055	$47,703	$51,963	$71,141	$68,656	$30,490
Switzerland	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$750
Taiwan	$3,778	$4,335	$9,628	$10,553	$14,782	$19,321	$14,599	$13,721	$0	$0	$5,807
Turkey	$246	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
World	$261,901	$310,348	$350,835	$293,913	$327,659	$362,587	$391,669	$347,688	$389,964	$369,512	$188,832
UNIT VALUE ($/MBF)											
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Australia	$1,934	$1,416	$0	$0	$0	$0	$0	$0	$0	$0	$0
Canada	$133	$227	$312	$274	$458	$234	$569	$322	$365	$210	$223
China	$277	$305	$413	$579	$636	$631	$593	$405	$517	$543	$619
Germany, West	$1,540	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Hong Kong	$0	$0	$0	$0	$783	$0	$0	$0	$0	$0	$0
India	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$680
Jamaica	$0	$0	$0	$733	$0	$0	$0	$0	$0	$0	$0
Japan	$699	$548	$622	$643	$668	$823	$813	$743	$779	$731	$673
Korea, South	$390	$381	$435	$354	$376	$525	$563	$550	$593	$511	$514
Switzerland	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$503
Taiwan	$420	$437	$529	$451	$533	$737	$612	$637	$0	$0	$707
Turkey	$135	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
World	$543	$493	$578	$569	$610	$725	$755	$641	$708	$648	$506

[1] Compiled from official statistics published by the U.S. Department of Commerce, 1999.

TABLE A-10.
Chip Exports from Alaska
Fiscal Years 1988-1998[1]

VOLUME (Metric Tons)											
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Canada	0	0	3,810	0	7,790	6,277	0	0	0	15,522	33,179
Japan	10,437	77,918	14,355	87,767	11,700	35,054	69,067	102,084	166,819	85,571	102,646
Korea, South	0	0	0	0	0	0	0	0	0	6,007	0
World	10,437	77,918	18,165	87,767	19,490	41,331	69,067	102,084	166,819	107,100	135,825
VALUE ($M)											
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Canada	$0	$0	$134	$0	$203	$134	$0	$0	$0	$1,351	$1,375
Japan	$559	$3,620	$1,285	$7,279	$1,343	$4,199	$8,216	$15,189	$17,488	$6,521	$9,902
Korea, South	$0	$0	$0	$0	$0	$0	$0	$0	$0	$396	$0
World	$559	$3,620	$1,419	$7,279	$1,546	$4,333	$8,216	$15,189	$17,488	$8,268	$11,277
UNIT VALUE ($/Metric Ton)											
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Canada	$0	$0	$35	$0	$26	$21	$0	$0	$0	$87	$41
Japan	$54	$46	$90	$83	$115	$120	$119	$149	$105	$76	$96
Korea, South	$0	$0	$0	$0	$0	$0	$0	$0	$0	$66	$0
World	$54	$46	$78	$83	$79	$105	$119	$149	$105	$77	$83

[1] Compiled from official statistics published by the U.S. Department of Commerce, 1999.

TABLE A-12.
Housing Starts in Japan[1]

Year	Total Number of Starts	Number Wood-Based	Percent Wood-Based	Average Floorspace (ft^2) Wood-Based	Average Floorspace (ft^2) Non-Wood
1965	842,596	646,536	77%		
1970	1,484,556	1,035,500	70%		
1972	1,807,581	1,111,846	62%		
1974	1,316,100	869,637	66%		
1979	1,492,926	909,582	61%		
1981	1,151,695	653,643	57%		
1982	1,146,144	666,960	58%		
1983	1,136,794	590,848	52%		
1984					
1985	1,236,072	591,911	48%	1,055	754
1986	1,364,609	633,858	46%	1,039	734
1987	1,674,300	741,552	44%	1,051	694
1988	1,684,644	697,267	41%	1,078	705
1989	1,662,612	719,870	43%	1,076	720
1990	1,707,109	727,770	43%	1,071	715
1991	1,370,126	624,003	46%	1,113	760
1992	1,402,590	671,130	48%	1,105	757
1993	1,485,684	697,496	47%	1,159	773
1994	1,570,252	721,431	46%	1,205	822
1995	1,470,330	666,124	45%	1,192	839
1996	1,643,266	754,296	46%	1,249	852
1997	1,387,014	611,316	44%	1,208	840
1998	1,198,295	545,133	46%	1,221	824

[1] Source: Japan Wood Products Information and Research Center, February 1999.

TABLE A-11.
Japanese Imports of Softwood Logs and Lumber
Calendar Years 1983-1998[1]

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
SOFTWOOD LUMBER (MBF[2])													
United States	577,622	522,354	558,725	721,678	923,680	983,549	1,112,793	1,050,406	1,019,237	896,018	857,142	788,254	748,193
Canada	849,408	817,447	916,030	882,669	1,172,328	1,337,909	1,565,897	1,568,587	1,786,722	1,870,031	2,312,241	2,338,706	2,464,340
Russia	54,488	61,964	64,240	71,531	76,014	94,212	110,675	112,355	101,653	95,132	120,648	148,448	179,669
New Zealand	114,863	76,458	65,531	49,583	55,909	53,006	45,025	88,153	109,214	105,311	99,636	106,894	123,350
Chile[3]	0	0	0	71,268	90,662	138,648	137,990	172,456	168,125	112,858	168,719	128,897	227,624
South Seas	20,776	14,987	31,202	45,407	46,626	50,115	49,961	33,061	45,343	41,262	57,259	56,006	55,371
Other	42,709	70,379	103,381	70,215	115,553	113,803	135,177	97,381	71,495	55,648	143,056	280,995	390,055
TOTAL	**1,659,867**	**1,563,590**	**1,739,108**	**1,912,352**	**2,480,771**	**2,771,242**	**3,157,519**	**3,122,399**	**3,301,791**	**3,176,260**	**3,758,702**	**3,848,201**	**4,189,601**
SOFTWOOD LOGS (MBF)													
United States	1,693,721	1,586,590	1,721,419	1,836,462	2,134,399	2,072,889	2,411,951	2,255,062	1,969,603	1,863,723	1,673,622	1,602,149	1,545,944
Canada	162,791	263,219	304,507	315,053	414,966	261,816	193,086	112,947	89,677	163,682	107,305	65,378	40,009
Russia	1,299,021	115,466	1,103,352	1,238,568	1,217,785	1,109,627	974,361	899,102	791,052	798,072	1,002,974	980,007	1,088,101
New Zealand	69,015	67,467	64,955	57,384	85,867	125,688	168,394	296,545	355,151	410,763	378,877	411,008	412,005
Chile[3]	0	0	0	59,568	55,271	47,623	53,261	68,894	60,451	35,667	44,387	26,042	23,989
South Seas	37,845	46,002	39,568	28,244	28,800	26,171	33,919	38,957	27,257	18,833	15,951	21,392	14,714
Other	52,543	82,444	89,060	5,052	5,847	5,680	12,813	11,112	9,972	13,205	29,649	81,264	143,613
TOTAL	**3,314,936**	**2,160,904**	**3,322,861**	**3,540,330**	**3,942,934**	**3,649,473**	**3,847,783**	**3,682,620**	**3,303,165**	**3,303,945**	**3,252,765**	**3,187,239**	**3,268,376**

[1] Source: Wood Supply and Demand Information Service, various issues. Published by Japan Wood Products Information and Research Center.
[2] Converted from cubic meters at a rate of 4.53 MBF log scale/m^3 and 2.36 MBF lumber tally/m^3.
[3] Prior to 1986, imports from Chile were included in the "Other" category.

TABLE A-11 (continued).
Japanese Imports of Softwood Logs and Lumber
Calendar Years 1983-1998

	1996	1997	1998
SOFTWOOD LUMBER (MBF)			
United States	746,171	557,158	284,847
Canada	2,554,453	2,395,599	1,617,139
Russia	171,938	221,602	131,371
New Zealand	121,125	143,129	104,620
Chile	172,790	258,567	161,154
South Seas	53,683	50,696	40,240
Other	555,422	949,947	501,619
TOTAL	**4,375,583**	**4,576,698**	**2,840,990**
SOFTWOOD LOGS (MBF)			
United States	1,508,576	1,224,494	925,654
Canada	26,169	25,896	101,993
Russia	1,107,518	1,269,295	979,960
New Zealand	471,006	437,263	412,709
Chile	28,289	33,847	24,345
South Seas	14,043	8,406	6,712
Other	78,670	82,805	54,536
TOTAL	**3,234,272**	**3,082,005**	**2,505,909**

PURCHASER	SALE NAME	9/30/94	9/30/95	9/30/96	9/30/97	9/30/98
L.B. Logging	Middle Steel Salvage	101.0	0	0	0	0
	Split Pit Salvage	94.0	0	0	0	0
Landers, Keith	Goose Bay Cedar II		10.0	2.0	0	0
Larson Wood Products	Afterburn Cedar Salvage					49.0
Last Chance Enterprises	Goose Bay Cedar	25.0	0	0	0	0
	Rush Too/East Rush Peak	23.0	0	0	0	0
	Roadside Hazard Removal	10.9	0	0	0	0
	Wolf Pup Log Salvage			10.0	0	0
	Inbetween Log Salvage				129.0	0
	4 Point Log Salvage				133.0	0
	Relief Salvage					256.0
McCormick Enterprises	Old Tom Cedar					186.8
	Charred Cedar Salvage					49.5
McGraw Gravel Sales, Inc.	False Island Blowdown	390.0	0	0	0	0
Metlakatla Forest Products	Tuxecan North	1,989.9	0	0	0	0
	Salt Lake	2,843.5	0	0	0	0
	Midpoint	5,328.0	2,844.0	0	0	0
	Deep Bay North	14,860.0	13,661.0	13,661.0	4,143.9	
	Timber Knob Pass Salvage			415.0	0	0
	Triangle Salvage			348.0	0	
	Foggy				1,088.0	678.0
Meyer, David	Lava Log Salvage				9.7	8.5
Monro, Mike	Spruce Flats Salvage			33.0	33.0	33.0
Music, Jeff	Edge Salvage			104.0	0	0
New Traditions	Sarkar Stringer	1.75	0	0	0	0
	Buck Snort/Lab Bay	37.8	25.5	0	0	0
	X-mark Stringer	22.0	6.0	0	0	0
	Staney Stringer	26.0	8.5	0	0	0
	Salamander Log Salvage		8.0	0	0	0
	Ratz Stringer		8.0	0	0	0
	Sweetwater Log Salvage		6.0	0	0	0
	Exchange Stringer					23.0
Rayonier, Inc.	Saginaw		24,141.0	24,041.0	24,041.0	21,346.0
	ATC				8,544.0	8,544.0
	Rowan Settlement				11,439.0	11,439.0
Richter, Patrick	Misplaced Timber				813.0	813.0
	Kwati Timber				620.0	0
	Kosciusko Stringer	37.0	0	0	0	53.4
	Port Alice Cull Log	59.0	59.0	0	0	0
Sealaska Timber Corp.	De Rumba Salvage	585.0	0	0	0	0
	Twenty Mile/Indian Creek	11,865.0	91.0	0	0	0
Seley Family Ltd. aka Seley Corp.	East Thorne Arm	193.5	0	0	0	0
	North Ridge Sale		924.0	0	0	0
	Red's Bridge		452.0	452.0	0	0
	Top of the World			199.0	0	0
	Lancaster Salvage				1,083.0	0
	Sentinal				3,590.0	0
	Rock King				2,056.0	0
	Cloudy					2787.9
	Picasso					607.9
	Abandon					278.0
	Peep Rock Timber					1,531.0
Silver Bay Logging	Appleton Resale		23,348.0	10,684.0	8,356.0	7,266.6
	Saook	29,833.0	29,833.0	29,833.0	23,348.0	23,348.0

TABLE A-13. Volume Under Contract Independent Sales

(MBF, Sawlog + Utility)

PURCHASER	SALE NAME	9/30/94	9/30/95	9/30/96	9/30/97	9/30/98
3-D Logging	Gander Salvage					36.2
Alaska Pacific Trading Co.	Granite	5,346.5	0	0	0	0
Alaska Fibre	Pipeline					15.2
Age, Frank	Zarembo Salvage	371.0	0	0	0	0
	Cedar			105.0	0	0
	Kindergarten Salvage			25.0	0	0
	One Ring				51.0	0
	Tatonka				67.0	0
	Hecata Sawfly Salvage				11,647.0	11,647.0
	Junction Timber				154.0	154.0
	Alder Creek Timber				2,183.0	2,183.0
	Loft Timber				297.0	297.0
	Ridge				629.0	629.0
Beaver Creek Logging Inc.	Ahtun Point Salvage					60.0
Belk Logging	Shikat Plus A-Frame	161.0	105.0	0	0	0
Big Salt Lumber	Upper Steel Salvage	72.1	0	0	0	0
	Rockie Dog II		11.0	0	0	0
	Rock Creek Slide II		71.0	71.0	0	0
Cedarville Timber & Logging	Snowpup	3,048.0	0	0	0	0
Chambers, Jack	Rynda Boomstick	4,546.0	1,937.3	0	0	0
	8400 Line Salvage	696.0	0	0	0	0
Cook, Mel	Peanut Sale			37.0	0	0
D & L Logging	Turnout Salvage	318.0	0	0	0	0
	Fogbank Salvage		180.0	0	0	0
	Freshwater Salvage		36.0	0	0	0
	Little Hamilton Salvage			331.0	331.0	331.0
D&L Woodworks	Tributary Salvage			113.0	0	0
Danger Point Timber	6245 Salvage					9.0
Ensely, Jim	Twin	65.0	0	0	0	0
Fox River Timber Corp.	Deep Bay South	2,904.1	0	0	0	0
Fuford, Ryan	Jubilee Cedar Salvage	15.0	0	0	0	0
Gateway Timber Co.	Pathway				15.2	0
Graves, Timothy	Kitkun Bay	4,212.8	0	0	0	0
H&L Salvage	E. Shaheen Cull Log	25.0	0	0	0	0
	Sleepy Cedar Too	20.0	5.0	0	0	0
	End of Road		30.0	5.0	0	0
	Son of Joe Cedar Salvage				5.2	0
	All Weather Log Salvage				32.0	0
	Cone Cedar Salvage					62.5
Hummer Enterprise	Kogish Cedar Salvage					62.0
Icy Straits Lumber Co.	Wukuklook Salvage		72.2	0	0	0
Jones, Jerry	Cutthroat Log Salvage			37.0	0	0
	Goose Creek Cedar Salvage			20.0	0	0
	Bubba Gump					48.0
	Southfork Salvage					.5
Jones, Warren	Polk Switchback Salvage			29.0	0	0
Kohnke, John	Froot Lake Salvage		9.0	6.0	0	0
L&L Logging	Two View	152.0	0	0	0	0

TABLE A-14. Volume Under Contract
Ketchikan Pulp Company
(MBF, Sawlog + Utility)

PURCHASER	SALE NAME	9/30/94	9/30/95	9/30/96	9/30/97	9/30/98
Ketchikan Pulp Company Contract	Offer 1 Lab/Whale Pass	51,343.0	51,343.0	52,802.0	0	0
	Offer 2 Coffman/Winter	7,000.0	0	0	0	0
	Offer 3 Thorne Bay	10,000.0	0	0	0	0
	Offer 4 Polk Inlet	6,000.0	0	0	0	0
	Offer 9 Shelter Cove	10,000.0	900.0	550.0	0	0
	Offer 11 North Saddle	13,973.0	5,500.0	2,000.0	0	0
	Offer 12 Sumez Island	23,921.0	5,250.0	0	0	0
	Offer 13 Hume Island	5,808.0	5,000.0	541.0	0	0
	Offer 14 Fire Cove	25,993.0	4,000.0	0	0	0
	Offer 15 Upper Salt Creek	31,196.0	11,000.0	3,433.0	0	0
	Offer 16 Slide/Lava	17,402.0	5,500.0	3,366.0	0	0
	Offer 17 South Margaret		23,000.0	13,264.0	3,594.6	0
	Offer 18 Traitors River		25,000.0	320.0	0	0
	Offer 19 Campbell	12,540.0	4,000.0	0	0	0
	Offer 20 Crab Bay (1)	30,986.0	30,986.0	9,000.0	cancelled	------------
	Offer 21 Inbetween	9,917.0	9,917.0	4,400.0	cancelled	------------
	Offer 22 Trumpeter 6		500.0	2,037.0	0	0
	Offer 23 Chin Pt./Bushy Pt.		41,500.0	40,872.0	32,006.2	27,827.5
	Offer 24 Little Coal Bay		17,500.0	0	17,537.4	16,509.5
	Offer 25 East Polk		17,000.0	14,865.0	6,839.6	0
	Offer 26 Thorne Bay II		12,000.0	14,328.0	6,537.0	4,246.5
	Offer 31 KSH			42,538.0	42,544.4	33,363.1
	Offer 32 North Thorne/Ratz			22,420.0	21,539.2	15,334.6
	Offer 33 Big Dewey			65,465.0	38,812.9	10,570.1
	Offer 34 Nauk/Sarkar				22,870.0	21,363.8
	Offer 35 West Polk			27,976.0	25,671.8	9,336.5
	Offer 36 East 12 Mile				27,320.0	27,320.0
	Sink Blowdown		156.0	0	0	0
	Swing		2,119.0	0	0	0
Subtotal KPC		**256,079.0**	**272,171.0**	**320,176.0**	**245,273.1**	**166,051.5**
Enjoined/Undercut Volume		**-92,246.0**	**-92,246.0**	**-0**	**-0**	**-0**
Available Unscaled Volume		**163,833.0**	**179,925.0**	**320,176.0**	**245,273.1**	**166,051.5**

PURCHASER	SALE NAME	9/30/94	9/30/95	9/30/96	9/30/97	9/30/98
	Hanus ATC			15,546.0	5,463.8	0
	South McKenzie			12,317.0	11,343.8	4,496.5
	King George				24,790.0	24,790.0
	Upper Carroll				30,072.0	30,072.0
	South Lindy					10,573.0
	Etolin					2,139.7
Sokol, Ray	Browns Cove Salvage				6.0	6.0
The Mill, Inc.	Sumner Salvage	3,105.0	1,748.0	0	0	0
	11-Mile Blowdown		47.0	0	0	0
Thorne Bay Lumber Enterprises	Tiny Salvage	16.0	0	0	0	0
	Fall/Six	36.0	31.0	0	0	0
	Bug Bite/RP Cull Log	36.0	6.2	0	0	0
	Rio Beaver	33.0	4.0	0	0	0
	North Thorne Stringer		14.0	0	0	0
	Stress Salvage		10.0	0	0	0
	Loop				50.0	0
	Little Hamilton Salvage Resale					331.0
	Buster Bay					233.0
Vandervort, Lawrence	800 Contour Salvage			58.0	15.4	0
Viking Lumber Company	Bohemia			33,710.0	30,619.0	23,959.0
	Dog Salmon Road Salvage			10.0	0	0
	Cape Pole			1,438.0	0	0
	Warren Channel			912.0	0	0
	Shamrock				24,280.0	15,246.0
	Mountain Beaver				468.0	
	Bo					1,305.2
	21 Salvage					57.0
Walker Wood Products	Bonanza Cull Log Salvage	119.0	119.0	0	0	0
Weber, Andy	Cutlog Cedar Salvage					63.7
West, Robert	49 Cedar Sale			20.0	0	0
	Old Franks Cedar			41.0	3.0	0
	Scene Salvage				1.0	0
Whitestone Logging	Humpback/Gallagher				21,319.0	21,121.1
Wilks Logging	East Polk Salvage	19.0	19.0	0	0	0
Wood Marine	Cavern Stringer	6.0	0	0	0	0
W.R. Tonsgard Logging	Eagle Salvage			71.0	0	0
	Two Bears Salvage			27.0	0	0
Subtotal Independent Sales		**93,646.8**	**100,362.7**	**144,711.0**	**252,814.0**	**229,226.2**
Enjoined Sales		**-29,833.0**	**-53,874.0**	**-0**	**-0**	**-10.573**
Available Unscaled Volume		**63,813.8**	**46,488.7**	**177,711.0**	**252,814.0**	**229,215.6**